

3D **An Industry-First!**

EMC noise visualization



Patent pending

Application 2012-096771
in Japan



Morita Tech Antennas
(optional)

WM9500: Stereo Camera and CCD Camera

The scan imaging camera and position detection camera are combined in a single unit.
You can customize the scanning area while you view the image on the PC.

**High-precision 3D
scanning with the
stereo camera**

**Handheld scanning
and good on-site
usability**

**Flexible combinations
that include antennas
and spectrum analyzers**

Obtain frequency component data indispensable for analysis!

3D spatial electromagnetic field visualization system

WM9500



Morita Tech Co., Ltd.

3D measurement brings innovation to EMC noise measurement.

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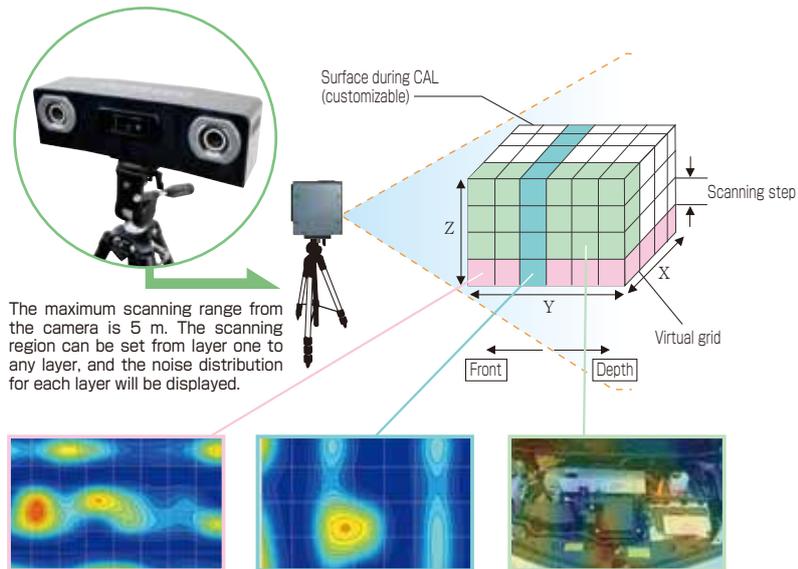
Multilateral noise source analysis possible

The WM9500 can detect the positions of an object's X/Y/Z coordinates in space through the use of infrared sensors and can measure the electromagnetic waves emitted from the object being scanned. This system can obtain data that is indispensable for analysis, including noise source locations, radiation direction, and frequency components.

Scanning procedure

Step 1: Position the special stereo camera. Configure the scanning area while monitoring the image on the PC.

Step 2: Touch the handheld antenna to the location you wish to scan to configure the infrared marker. The scanning area can be divided into cubes ranging from one to dozens of cm³ in size, and a noise map can be displayed and saved on the PC by moving the antenna.



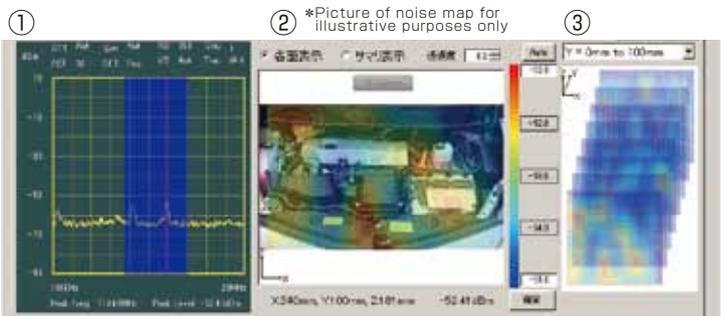
The desired X-Y, X-Z, and Y-Z cross-section images can be extracted. Noise sources and noise distribution can be identified through visual imaging.

Good user-friendliness, usable by anyone Not affected by the scanning site or target object

- Because coordinates are recognized by infrared radiation, regardless of the environment and location.
- The lighting of the scanning site and color of the target object have absolutely no effect. (The unit will successfully measure noise from a single unit or finished product.)
- Scanning can be performed in any location regardless of how cramped or dark it is, including such locations as vehicle engine compartments and trunks.
- Handheld operation enables highly mobile scanning.

Customizable combinations! You can use the devices you already have.

- The system consists of five components: a tripod-mounted stereo camera unit with a CCD camera, a control laptop PC, a controller unit, marker balls, and special software.
- For the spectrum analyzer and scanning antenna, you can use the devices you already have.



Example of noise measurement performed by the spectrum analyzer. The device features ①distribution checking for customizable frequency ranges, ②noise maps overlaid onto photographs, and ③data slicing along the height axis.

WM9500 specifications

Scanning range	Recommended: approx. 0.6 m - 2 m (maximum of approx. 5 m), viewing angle of 56°
Scanning method	Spatial coordinates obtained using infrared reflectiveness (850 nm)
Camera	High-definition camera with autofocus functionality
Positional accuracy	±1 mm (at recommended distance of 2 m)
Scanning pitch	Minimum 1 mm (customizable using the control software)
External dimensions	Main unit: W400 mm × D109 mm × H124 mm Controller: W320 mm × D280 mm × H94.5 mm
Control method	USB2.0
Input voltage	100 V - 240 V AC
Maximum power consumption	60 VA (not including the spectrum analyzer)
Controller	Dedicated PC

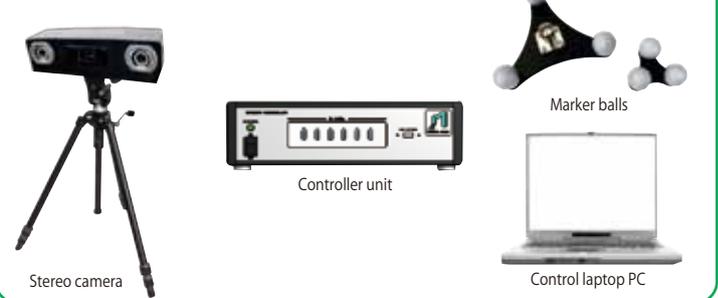
Manufacturer



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WM9500 system composition



Sensors and probes



We recommend the use of our company's probe (left) and antenna (right) in order for you to get the maximum functionality and performance out of the WM9500.

Distributor